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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

UPTON, CHRISTOPHER

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 09/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

919403

Applicant(s)

Schindler

Examiner

Upton

Group Art Unit

1724

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-19 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-19 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 4, 5
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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1. The use of the trademark "GeoProbe" has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The "GeoProbe" process is not generically described in the specification.

2. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 contains the trademark/trade name "GeoProbe." Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to

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identify/describe an injection point installation process and, accordingly, the identification/description is indefinite.

Claim 9 recites airjet installation, but does not recite the steps comprising airjet installation.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4, 6, 7 and 10-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Perriello.

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Perriello discloses a method and system for treating groundwater comprising the injection of bottled oxygen (see claim 15) and microbes (see claim 40) to an injection point, as claimed.

5. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perriello.

Claim 5 differs from Perriello in recitation of a grid of injection points. It is submitted that the positioning of injection points is a matter of site-specific process optimization, and therefore fails to patentably distinguish over Perriello.

6. Claims 1 and 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Schuring.

Schuring discloses a method and system for groundwater remediation comprising injecting oxygen (while compressed air is disclosed as being preferred, the use of pure oxygen is disclosed in column 16, lines 19-20) and microorganisms, as claimed.

7. Claims 1, 15, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawabata et al.

Kawabata discloses the injection of microorganisms and oxygen (see claim 8) for groundwater treatment, as claimed.

8. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawabata et al.

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Claims 16 and 17 differ from Kawabata in recitation of the use of liquid oxygen, which is vaporized. It is submitted that bottled oxygen is a well known source of oxygen, and therefore this recitation fails to patentably distinguish over Kawabata.

9. Claims 2-7 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawabata or Schuring as applied to claims 1 and 15-17 above, and further in view of Udell et al.

Claims 2-7 and 10-14 differ from Kawabata and Schuring in recitation of a grid of plural injection points with independent controls. It is well known to provide such an array of injection points and controls for groundwater remediation, as exemplified by Udell (see figure 1). It would therefore have been obvious for one of ordinary skill in the art to use such an array with the systems of Udell and Kawabata, depending on the size and configuration of the contaminated site.

10. Claims 1-4, 10, 14, 15, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Carter.

Carter discloses the injection of oxygen and microorganisms (see claim 3) for groundwater treatment, as claimed.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carter.

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Claim 5 differs from Carter in recitation of a grid of injection points. It is submitted that the positioning of injection points is a matter of site-specific process optimization, and therefore fails to patentably distinguish over Carter.

12. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter, Schuring et al, Kawabata et al or Perriello.

Claims 8 and 9 differ from Carter, Schuring et al, Kawabata et al or Perriello in recitation of the method for installing the injection points. It is submitted that the use of any known method for installing the injection points would have been an obvious matter of process optimization for one skilled in the art, depending on the site conditions, and therefore fails to patentably distinguish over the prior art, absent a declaration showing unexpected results.

13. Claims 1-5, 9, 10, 15, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Keist et al.

Keist discloses the addition of microorganisms and oxygen (see column 4, lines 50-52) by fluid jetting, as claimed.

14. Claims 6, 7, 11, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keist et al.

Claims 6, 7, 11, 16 and 17 differ from Keist in recitation of the use of liquid oxygen, which is vaporized. It is submitted that bottled oxygen is a well known

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source of compressed oxygen, and therefore this recitation fails to patentably distinguish over Keist.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Other references of interest include Nickell, Shaw, Alford and Looney.

16. Any inquiry concerning this communication should be directed to Christopher Upton at telephone number (703) 308-3741.



CHRISTOPHER UPTON
PRIMARY EXAMINER